

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL		5. MINERAL LEASE NO: ML-47087	6. SURFACE: State
1A. TYPE OF WORK: DRILL <input checked="" type="checkbox"/> REENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/>		7. IF INDIAN, ALLOTTEE OR TRIBE NAME:	
B. TYPE OF WELL: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER _____ SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		8. UNIT or CA AGREEMENT NAME:	
2. NAME OF OPERATOR: Enduring Resources, LLC		9. WELL NAME and NUMBER: Buck Camp 11-23-43-2	
3. ADDRESS OF OPERATOR: 475 17th St., Ste 1500 CITY Denver STATE CO ZIP 80220		10. FIELD AND POOL, OR WILDCAT: Undesignated	
4. LOCATION OF WELL (FOOTAGES) 645178 X 4416306 Y 39.886289 -109.302126 AT SURFACE: 1533' FSL - 490' FFL NESE AT PROPOSED PRODUCING ZONE: 1984' FSL - 661' FEL NESE 645124 X 4416443 Y 39.887530 -109.302728		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESE 2 11S 23E S	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 76.5 miles from Vernal, Utah		12. COUNTY: Uintah	13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET) 661' BHL - (Surface is 300' from lease line)	16. NUMBER OF ACRES IN LEASE: 32.71 - 5.93	17. NUMBER OF ACRES ASSIGNED TO THIS WELL: 40 (38.61)	
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET) 1200'+ BHL (surface is 25')	19. PROPOSED DEPTH: 7,730	20. BOND DESCRIPTION: RLB0008031	
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 5879' KB-RT	22. APPROXIMATE DATE WORK WILL START: 6/1/2006	23. ESTIMATED DURATION: 20 days	

24. PROPOSED CASING AND CEMENTING PROGRAM							
SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT			SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD, AND SLURRY WEIGHT		
20"	14" line pipe			40	3 yards Ready Mix		
11"	8-5/8"	J-55	24#	2,000	Premium Lead	138 sxs	3.50 11.1
					Premium Tail	138 sxs	1.15 15.8
7-7/8"	4-1/2"	N-80	11.6#	7,730	Class G	118 sxs	3.3 11.0
					50/50 Poz Class G	854 sxs	1.56 14.3

25. ATTACHMENTS	
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:	
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER <input checked="" type="checkbox"/> EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN <input type="checkbox"/> FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) <u>Alvin R. (Al) Arlian</u>	TITLE <u>Landman - Regulatory Specialist</u>
SIGNATURE	DATE <u>4/14/2006</u>

(This space for State use only)

API NUMBER ASSIGNED: 43047-38035

APPROVAL:

RECEIVED
APR 25 2006
DIV. OF OIL, GAS & MINING

ENDURING RESOURCES, LLC

425 Seventeenth Street, Suite 1500

Denver, Colorado 80202

Telephone: 303-573-1222

Facsimile: 303-573-0461

April 14, 2006

State of Utah
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, Utah 84114-5801

Attention: Ms. Diana Whitney

RE: Request for Exception and Directional Well Locations

Rock House 11-23-43-2

Surface: NESE Section 2-T11S-R23E

1533' FSL – 490' FEL

BHL: NESE Section 2-T11S-R23E

1984' FSL – 661' FEL

Lse #ML 47087 Uintah Cnty, UT

Rock House 11-23-44-2

Surface: NESE Section 2-T11S-R23E

1542' FSL – 511' FEL

BHL: SESE Section 2-T11S-R23E

661' FSL – 661' FEL

Lse #ML 47087 Uintah Cnty, UT

Dear Ms. Whitney:

Enduring Resources, LLC ("ERLLC") is the only leasehold interest owner within 460 feet of any part of the above-referenced proposed wells' proposed well bores.

1. **Both of these wells will be drilled from the same pad to reduce surface impact and avoid drilled on steep slopes,**
2. The subject wells' surface location is only 25 feet apart. However
3. The BHL's will be within each well's 200' drilling window.

ERLLC is the only leasehold interest owner within ALL of Sec 2, therefore,

- A. *ERLLC grants itself permission to directionally drill both wells, and*
- B. *ERLLC also grants itself permission for exception well(s)' surface locations.*

In the event there are any other outstanding matters preventing these APD's from being approved, please let me know at your earliest convenience, 303-350-5114 (aarlian@enduringresources.com).

Very truly yours

ENDURING RESOURCES, LLC



Alvin R. (Al) Arlian
Landman – Regulatory Specialist

ara/

cc: SITLA

RECEIVED
APR 25 2006
DIV. OF OIL, GAS & MINING

Enduring Resources, LLC

Rock House 11-23-43-2

NE-SE 2-11S-23E (Bottom Hole Location)

NE-SE 2-11S-23E (Surface Location)

Uintah County, Utah

State Lease: ML-47078

ONSHORE ORDER 1 - DRILLING PLAN

1. Estimated Tops of Geological Markers:

Formation	Depth (K.B.)
Uinta	Surface
Green River	534'
Wasatch	3454'
Mesaverde	5244'

2. Estimated Depths of Anticipated Water, Oil, Gas or Other Minerals:

Substance	Formation	Depth (K.B.) TVD
	KB-Uinta Elevation: 5879' est.	
Oil / Gas	Green River	534'
Oil /Gas	Wasatch	3454'
Oil /Gas	Mesaverde	5244'
	TD	7730'

An 11" hole will be drilled to approximately 2000 feet. The depth will be determined by the depth that the Birds Nest zone is encountered. The hole will be drilled 400 feet beyond the top of the Birds Nest zone and surface casing will be set.

3. Pressure Control Equipment: (3000 psi schematic attached)

- A. Type: Eleven (11) inch double gate hydraulic BOP with eleven (11) inch annular preventer on 3,000 psi casinghead, with 3,000 psi choke manifold equipped per the attached diagram. BOPE as specified in *Onshore Oil & Gas Order Number 2*. A PVT, stroke counter and flow sensor will be installed to check for flow and monitor pit volume.
- B. Pressure Rating: 3,000 psi BOPE
- C. Kelly will be equipped with upper and lower Kelly valves.
- D. Testing Procedure: Annular Preventer

At a minimum, the annular preventer will be pressure tested to 50% of the stack rated working pressure for a period of ten (10) minutes or until provisions of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the annular preventer is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the annular preventer will be functionally operated at least weekly.

Blow-Out Preventer

At a minimum, the BOP, choke manifold, and related equipment will be pressure tested to the approved working pressure of the BOP stack (if isolated from the surface casing by a test plug) or to 70% of the internal yield strength of the surface casing (if the BOP is not isolated from the casing by a test plug). Pressure will be maintained for a period of at least ten (10) minutes or until the requirements of the test are met, whichever is longer.

At a minimum, the above pressure test will be performed:

1. When the BOP is initially installed;
2. Whenever any seal subject to test pressure is broken;
3. Following related repairs; and
4. At thirty (30) day intervals.

In addition to the above, the pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills and tests will be recorded in the IADC driller's log.

E. Miscellaneous Information:

The blowout preventer and related pressure control equipment will be installed, tested and maintained in compliance with the specifications in and requirements of *Onshore Oil & Gas Order Number 2*.

4. Proposed Casing & Cementing Program:

A. Casing Program: All New

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Depth Set (MD)
20"	14" O.D.				40' (GL)
11"	8-5/8"	24#	J-55	ST&C	0 – 2016' (KB) est.
7-7/8"	4-1/2"	11.6#	N-80	LT&C	0 – 7730' (KB)

The surface casing will have guide shoe, 1 joint, insert float collar. Centralize the shoe joint with bowspring centralizers in the middle and top of the joint and the next 16 joints with bowspring centralizers on every other collar (8 centralizers total). Thread lock guide shoe.

Casing string(s) will be pressure tested to 0.22 psi/foot of casing string length or 1500 psi, whichever is greater (not to exceed 70% of the internal yield strength of the casing), after cementing and prior to drilling out from under the casing shoe.

B. Casing Design Parameters:

Depth (MD)	Casing	Collapse(psi)/SF	Burst (psi)/SF	Tension(mlbs)/SF
40' (GL)	14" OD			
2016' (KB)	8-5/8", 24#/ft, J55, STC	1370/1.52(a)	2950/3.28(b)	244/5.81(c)
7730' (KB)	4-1/2", 11.6#/ft, N-80, LTC	6350/1.58 (d)	7780/2.11 (e)	223/2.89 (f)

- (a.) based on full evacuation of pipe with 8.6 ppg fluid on annulus
- (b.) based on 8.6 ppg gradient with no fluid on annulus
- (c.) based on casing string weight in 8.6 ppg mud
- (d.) based on full evacuation of pipe with 10.0 ppg fluid on annulus
- (e.) based on 9.2 ppg gradient, gas to surface, with no fluid on annulus, no gas gradient
- (f.) based on casing string weight in 9.2 ppg mud

PROPOSED CEMENTING PROGRAM

Surface Casing (if well will circulate)-Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft ³ /sx)
8-5/8"	Lead	1516	Premium cement + 16% gel + 0.25 pps celloflake	138	25%	11.1	3.50
8-5/8"	Tail	500	Premium cement + 2% CaCl ₂ + 0.25 pps celloflake	138	25%	15.8	1.15

A cement top job is required if cement fallback is greater than 10' below ground level. Top job (weight 15.8 ppg, yield 1.15 ft³/sx) cement will be premium cement w/ 3% CaCl₂ + 0.25 pps celloflake. Volume as required

Surface Casing (if well will not circulate) - Cemented to surface

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft ³ /sx)
8-5/8"	Lead	500	Premium cement + 2% CaCl ₂ + 0.25 pps celloflake	138	25	15.8	1.15
8-5/8"	Top job	As req.	Premium cement + 3% CaCl ₂ + 0.25 pps celloflake	As Req.		15.8	1.15

Production Casing and Liner - Cemented TD to 300' above base of surface casing

CASING	SLURRY	FT. of FILL	CEMENT TYPE	SXS	EXCESS (%)	WEIGHT (ppg)	YIELD (ft ³ /sx)
4-1/2"	Lead	1338	Class "G" + 5% NaCl + 12% Gel + 0.25 pps celloflake + 0.2% antifoam + 0.25% fluid loss + 1% extender	118	25	11.0	3.3
4-1/2"	Tail	4676	50/50 POZ Class G + 2% gel + 1% CaCl ₂ + 0.2% dispersant + 0.2% fluid loss + 0.1% antifoam	854	25	14.3	1.56

Cement volumes for the 4-1/2" Production Casing will be calculated to provide a top of cement to 300' above base of surface casing. Cement volumes are approximate and were calculated under the assumption that a gauge hole will be achieved. Actual cement volumes may vary due to variations in the actual hole size and will be determined by running a caliper log on the drilled hole. Actual cement types may vary due to hole conditions and cement contractor used.

All waiting on cement (WOC) times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.

5. **Drilling Fluids (mud) Program:**

Interval (MD)	Mud Weight	Fluid Loss	Viscosity	Mud Type
0' - 2016' (KB)		No cntrl		Air/mist
2000'-3000' (KB)	8.4-8.6	No cntrl	28-36	Water
3000'-7730' (KB)	8.8-9.8	8 - 10 ml	32-42	Water/Gel

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blowout will be available at the well site during drilling operations.

6. **Evaluation Program:**

Tests: No tests are currently planned.

Coring: No cores are currently planned.

Samples: No sampling is currently planned.

Logging

- Dual Induction – SFL /Gamma Ray/Caliper/SP/TDLT/CNL/ML
TD to Base Surface Casing
- Cement Bond Log / Gamma Ray:
TD to Base of Surface Casing or Top of Cement if below Base of Surface Casing

Stimulation: A stimulation or frac treatment will be designed for completion of this well based on openhole log analysis. The drill site, as approved, will be sufficient size to accommodate all completion activities.

7. **Abnormal Conditions:**

No abnormal temperatures or pressures are anticipated. No H₂S has been encountered or known to exist from previous wells drilled to similar depths in the general area.

Maximum anticipated bottom hole pressure equals approximately 4,020 psi (calculated at 0.52 psi/foot of hole) and maximum anticipated surface pressure equals approximately 2319 psi (anticipated bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot of hole).

8. **Anticipated Starting Dates:**

- Anticipated Commencement Date- Within one year of APD issue.
- Drilling Days- Approximately 10 days
- Completion Days - Approximately 10 days
- Anticipate location construction within 30 days of permit issue.

9. **Variances:**

None anticipated

10. **Other:**

A Cultural Resource Inventory and Paleontology reconnaissance shall be conducted for the well location, access route and pipeline. The reports shall be submitted to the Division of Oil, Gas and Mining and the School and Institutional Trust lands Administration upon their receipt.

A measurement while drilling (MWD) system will be used to track and control the directional path of the wellbore.

Enduring Resources, LLC

Rock House 11-23-43-2

NE-SE 2-11S-23E (Bottom Hole Location)

NE-SE 2-11S-23E (Surface Location)

Uintah County, Utah

State Lease: ML-47078

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

Directions to Rock House 11-23-43-2 and Rock House 11-23-44-2 Wells.

(These wells will be directionally drilled from a two well pad (exceptional well surface location).

FROM THE INTERSECTION OF U.S. HIGHWAY 40 AND 500 EAST STREET IN VERNAL, UTAH PROCEED IN AN EASTERLY THEN SOUTHERLY DIRECTION ALONG U.S. HIGHWAY 40 APPROXIMATELY 3.3 MILES TO THE JUNCTION OF STATE HIGHWAY 45; EXIT RIGHT AND PROCEED IN A SOUTHERLY DIRECTION ALONG STATE HIGHWAY 45 APPROXIMATELY 40.5 MILES TO THE JUNCTION OF THE DRAGON ROAD (COUNTY B ROAD 4180). THIS ROAD IS LOCATED APPROXIMATELY 4.8 MILES SOUTH OF BONANZA, UTAH. EXIT LEFT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG COUNTY B ROAD 4180 APPROXIMATELY 4.0 MILES TO THE JUNCTION OF THE KINGS WELLS ROAD (COUNTY B ROAD 4190). EXIT RIGHT AND PROCEED IN A SOUTHWESTERLY DIRECTION ALONG COUNTY B ROAD 4190 APPROXIMATELY 8.7 MILES TO THE JUNCTION OF THE ATCHEE RIDGE ROAD (COUNTY B ROAD 4270). CONTINUE ALONG COUNTY B ROAD 4190 IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 4.3 MILES TO THE JUNCTION OF THE LONG DRAW ROAD (COUNTY B ROAD 4260). CONTINUE ALONG COUNTY B ROAD 4190 IN A SOUTHERLY, THEN WESTERLY DIRECTION APPROXIMATELY 4.0 MILES TO THE JUNCTION OF COUNTY B ROAD 4160. EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4160 APPROXIMATELY 0.5 MILES TO THE JUNCTION OF THE BITTER CREEK ROAD (COUNTY B ROAD 4120). EXIT LEFT AND PROCEED IN A WESTERLY DIRECTION ALONG COUNTY B ROAD 4120 APPROXIMATELY 1.9 MILES TO THE JUNCTION OF COUNTY B ROAD 4230. EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4230 APPROXIMATELY 0.9 MILES TO THE JUNCTION OF THE ATCHEES WASH ROAD (COUNTY B ROAD 4240). EXIT RIGHT AND PROCEED IN A NORTHERLY DIRECTION ALONG COUNTY B ROAD 4240 APPROXIMATELY 6.6 MILES TO THE INTERSECTION OF A SERVICE ROAD. EXIT RIGHT AND PROCEED IN A SOUTHEASTERLY DIRECTION ALONG THE SERVICE ROAD APPROXIMATELY 0.7 MILES TO THE PROPOSED ACCESS ROAD. FOLLOW ROAD FLAGS IN AN EASTERLY DIRECTION APPROXIMATELY 6,065 FEET TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 76.5 MILES IN A SOUTHEASTERLY DIRECTION.

2. **Planned Access Roads:**

The proposed access road will be approximately 6,065 feet of new construction all on-lease if this well is drilled after the Rock House 11-23-33-2, Rock House 11-23-24-2, or Rock House 11-23-34-2 wells' pad. If this well pad is built first then an additional 2,800 feet of road will have to be built on lease to an existing road (apparently a claimed county road. The 900' of off-lease road also appears on county road maps. (See County map which has been added to the surveyor plats).

ALL NEW CONSTRUCTION IS ON SITLA LANDS, However, the apparently county road (900' of off-lease on BLM and county road on-lease) will be improved, if needed, to meet Uintah County, SITLA, BLM (and DOG&M) requirements, however no improvement is anticipated. This existing (county road) went to the Rock House 23-2 dryhole/abandoned well in the NWSE of Sec 2-11S-23E.

Enduring has filed a r-o-w application with the BLM to use the 900' of BLM off-lease road (county Class D road?).

The proposed access road will be utilized to transport personnel, equipment and supplies to and from the proposed well site during drilling, completion and production operations. The road will be utilized year round.

The access road will be crowned 2% to 3%, ditched and constructed with a running surface of 18 feet and a maximum disturbed width of 30 feet right-of-way. Maximum grade of road is 5% or less. Graveling or capping the roadbed will be performed as necessary to provide a well constructed, safe road. No fence crossings, culverts, turnouts, cattle guards or major cuts and fills are required. Prior to construction or upgrading, the proposed road shall be cleared of any snow and allowed to dry completely.

Surface disturbance and vehicular traffic will be limited to the proposed location and proposed access route. Any additional area needed will be approved in advance. All construction shall be in conformance with the standards outlined in the BLM and Forest Service publication: Surface Operating Standards for Oil and Gas Exploration and Development. 1989.

The road surface and shoulders will be kept in a safe usable condition and will be maintained in accordance with the original construction standards. All drainage ditches will be kept clear and free flowing and will be maintained according to original construction standards. The access road surface will be kept free of trash during operations. All traffic will be confined to the approved disturbed surface. Road drainage crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the road bed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided. When snow is removed from the road during the winter months, the snow shall be pushed outside of the borrow ditches and the turnouts kept clear so that

snowmelt will be channeled away from the road.

3. **Location of Existing Wells within a One-Mile radius (See "Topo" Map "C" attached):**

The following wells are wells located within a one (1) mile or greater radius of the proposed location.

- a. None: Water Wells:
- b. None: Injection Wells:
- c. (2): Producing Wells:
 - i. Rock House U 21 SENW Sec. 11-11S-23E
 - ii. Rainbow Unit 4 SE/4 Sec 1-11S-23E
- d. None: Drilling Wells:
- e. None: Shut-in Wells:
- f. None: Temporarily Abandoned Wells:
- g. None: Disposal Wells:
- h. (3): Abandoned Wells:
 - i. State 1 NWSW Sec. 2-11S-23E
 - ii. State M23-2 NESW Sec 2-11S-23E
 - iii. Rainbow Unit 8 NWNE 12-11S-23E
- i. None: Dry Holes:
- j. None: Observation Wells:
- k. Various: Pending (staked) Wells:
 - i. Various wells staked by Enduring in Sec. 2-11S-23E

4. **Location of Existing and/or Proposed Facilities:**

All production facilities will be located on the disturbed portion of the well pad and at a minimum of 25 feet from the toe of the back slope or the top of the fill slope.

A dike will be constructed completely around those production facilities which contain fluids (i.e. production tanks, produced water tanks and/or heater treater). These dikes will be constructed of compacted subsoil, be impervious, hold 100% of the capacity of the largest tank and be independent of the back cut.

All permanent (on site for six months or longer) above the ground structures constructed or installed, including pumping units, will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the rocky Mountain Five State Inter-Agency Committee

All facilities will be painted within 6 months of installation. The color shall be Dark Olive Black. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded.

Any necessary pits will be properly fenced to protect livestock and prevent wildlife entry.

Gas Gathering Pipeline for this well will be:

*6,015'	6" Surface Pipeline On-Lease	SITLA
-0-	Off-Lease	N/A

A 6" surface pipeline will be constructed along the well access road from the well to the Rock House 11-23-33-2, Rock House 11-23-24-2, or Rock House 11-23-34-2 wells' (3 well pad) pipeline, or

*If this well is drilled first, then additional 6" surface pipeline will be laid next to the access road back out to and tie-in the proposed pipeline in section 3. (900' of BLM, r-o-w applied for and 2,800' additional on-lease.

If this well is capable of economic production, a 6" steel surface gas gathering line and related equipment shall be installed. The surface gas gathering line shall be in use year round. A total of approximately less than 6,015 feet of surface gas gathering pipeline shall be laid on the surface to minimize surface disturbance:

The proposed pipeline will begin at the well site; and be laid on the surface next to the new access road (north) to tie-in to a steel surface pipeline that is being *proposed for the Rock House 11-23-33-2, Rock House 11-23-24-2, or Rock House 11-23-34-2 wells.

The meter run will be housed. The gas gathering line will be buried or anchored down from the wellhead to the meter.

Upon plugging and abandonment, the gas gathering line will be removed and the disturbed area will be re-contoured and restored as near as practical to the original condition. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

5. Location and Type of Water Supply:

Whenever practical, water will be obtained from Enduring Resources LLC Water Right Number 49-2215 or Water Right Number 49-2216 (*See Townships of permitted Use below). If those sources are not available, a new water source shall be submitted prior to commencing operations. (These permits have one-year terms and then must be renewed)

*Enduring Water Permits' Townships of Use:

T10S-R22E	T11S-R22E	T12S-R22E
T10S-R23E	T11S-R23E	T12S-R23E
T10S-R24E	T11S-R24E	T12S-R24E

Water will be hauled to the location over the roads marked on "Topo" Maps "A" and "B."

No water well is to be drilled on this lease.

6 Source of Construction Materials:

Surface and subsoil materials in the immediate area will be utilized for location and access road construction.

Any gravel will be obtained from a commercial source; however, gravel sized rock debris associated with location and access road construction may be used as access road surfacing material.

7. Methods of Handling Waste Materials:

Drill cuttings will be contained and buried in the reserve pit.

Drilling fluids, including salts and chemicals, will be contained in the reserve pit will be removed and disposed of at an approved waste disposal facility within 120 days after drilling is terminated.

The reserve pit will be constructed on the location and will not be located within natural drainage, where a flood hazard exists or surface runoff will destroy or damage the pit walls. The reserve pit will be constructed so that it will not leak, break or allow discharge of liquids.

The reserve pit will be lined with ¼ felt and a minimum of 16 mm plastic with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the will be disposed of in the pit.

A chemical portable toilet will be furnished with the drilling rig. The toilet will be replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with state and county regulations.

Garbage, trash and other waste materials will be collected in a portable, self-contained, fully enclosed trash cage during operations. No trash will be burned on location.

All debris and other waste material not contained in the trash cage will be cleaned up and removed from the location immediately after removal of the drilling rig.

Any open pits will be fenced during the operations. The fencing will be maintained until such time as the pits are backfilled.

No chemicals subject to reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported or disposed of in association with the drilling, completion or testing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported or disposed of in association with the drilling, completion or testing of this well.

Produced oil will be stored in an oil tank and then hauled by truck to a crude purchaser facility. Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to an approved disposal site.

8. Ancillary Facilities:

During drilling operations, approximately 20 days, the site will be a manned camp. Three or four additional trailers will be on location to serve as the crews' housing and eating facilities. These will be located on the perimeter of the pad site within the topsoil stockpiles. Refer to Sheet 4.

9. Well Site Layout: (Refer to Sheets #2, #3, and #4)

The attached Location Layout Diagrams described drill pad cross-sections, cuts and fills and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s) and surface material stockpiles(s).

Please see the attached diagram for rig orientation and access roads.

The top soil will be windrowed rather than piled. It will be reseeded and track walker at the time the location is constructed. Seeding will be with the determined during the onsite. (Refer to "Seed Mixture for Windrowed Top Soil Will included:" following herein.

The top soil removed from the pit area will be store separately and will not be reseeded until the pit is reclaimed.

All pits shall be fence to the following minimum standards:

- a. 39 inch net wire shall be used with at least one strand of barbed wire on top of the net wire. Barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence.
- b. The net wire shall be no more than 2 inches above the ground. The barbed wire shall be 3 inches over the new wire. Total height of the fence shall be at least 42 inches.
- c. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- d. Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two fence posts shall be no greater than 16 feet.
- e. All wire shall be stretched by, using a stretching device, before it is attached to corner posts.
- f. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.
- g. Location size may change prior to drilling the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling, the location will be re-surveyed and a Form 9 will be submitted.

10. Plans for Surface Reclamation:

Producing Location:

- a. Immediately upon well completion (**of the two wells to be drilled from this pad**), the location and surrounding area will be cleared of all unused tubing, equipment, materials, trash and debris not required for production.
- b. Immediately upon well completion (**of the two wells to be drilled from this pad**), any hydrocarbons in the pit shall be removed in accordance with 40CFR 3162.7.
- c. Before any dirt work associated with location restoration takes place, the reserve pit shall be as dry as possible. All debris in it will be removed. Other waste and spoil materials will be disposed of immediately upon completion of operations.
- d. The reserve pit (**of the two wells to be drilled from this pad**) and that portion of the location not needed for production facilities/operations will be re-contoured to the approximated natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion, weather permitting.
- e. To prevent surface water(s) from standing (ponding) on the reclaimed reserve pit area, final reclamation of the reserve pit will consist of "mounding" the surface 3 feet above surrounding round surface to allow the reclaimed pit area to drain effectively.
- f. Upon completion of back filling, leveling and re-contouring, the stockpiled topsoil will be spread evenly over the reclaimed area(s).

Dry Hole/Abandoned Location:

- i. Abandoned well sites, roads and other disturbed areas will be restored as nearly as practical to their original condition. Where applicable, these conditions include the re-establishment of irrigation systems, the re-establishment of appropriate soil conditions and re-establishment of vegetation as specified.
- ii. All disturbed surfaces will be re-contoured to the approximated natural contours with reclamation of the well pad and access road to be performed as soon as practical after final abandonment. If necessary, re-seeding operations will be performed after completion of other reclamation operations.

Seed Mixture for Windrowed Top Soil Will Included:

To be provided by the SITLA.

11. Surface Ownership: Location, Access and Pipeline Route:

Wellsite: SITLA

Access: SITLA and BLM

Pipeline: SITLA and BLM

12. Other Information

On-site Inspection for Location, Access and Pipeline Route:

The on-site will be scheduled by SITLA and DOG&M.

Special Conditions of Approval:

- Tanks and Production Equipment shall be painted Dark Olive Black.
- Surface Gathering Pipeline shall be 6" or less
-

Archeology:

- a. A Cultural Resource Inventory Report is pending and to be prepared by Montgomery Archaeological Consultants.

Paleontology:

- a. A Paleontology Reconnaissance Report is pending and to be prepared by Intermountain Paleo-Consulting.

If, during operations, any archaeological or historical sites, or any objects of antiquity (subject to the Antiquities Act of June 8, 1906) are discovered, all operations which would affect such sites will be suspended and the discovery reported promptly to the surface management agency.

13, Lessee's or Operator's Representatives:**Representatives:**

Alvin R. (Al) Arlian
Landman – Regulatory Specialist
Enduring Resources, LLC
475 17th Street, Suite 1500
Denver, Colorado 80202
Office Tel: 303-350-5114
Fax Tel: 303-573-0461
aarlian@enduringresources.com

Tim Singleton
Drilling Engineer
Enduring Resources, LLC
475 17th Street, Suite 1500
Denver, Colorado 80202
Office Tel: 303-573-5711
Fax Tel: 303-573-0461
tsingleton@enduringresources.com



ENDURING RESOURCES
Rock House 11-23-43-2
NE/SE Sec. 2, T11S, R23E
Uintah County, Utah



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	339.30	0.00	0.00	0.00	0.00	0.00	0.00	
2	2072.00	0.00	339.30	2072.00	0.00	0.00	0.00	0.00	0.00	KOP
3	2615.06	10.86	339.30	2611.81	48.00	-18.14	2.00	339.30	51.32	End Build
4	4354.79	10.86	339.30	4320.38	354.66	-134.01	0.00	0.00	379.13	Start Drop
5	5440.90	0.00	339.30	5400.00	450.67	-170.29	1.00	180.00	481.77	Start Hold
6	7770.90	0.00	339.30	7730.00	450.67	-170.29	0.00	339.30	481.77	TD



RKB Elevation: 5879.00
Ground Elevation: 5862.90

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Rock House 11-23-43-2	0.00	0.00	7134874.04	2256889.15	39°53'10.470N	109°18'10.110W	N/A

FIELD DETAILS

Uintah, Utah
Utah Central Zone
U.S.A.

Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: Utah, Central Zone
Magnetic Model: igrf2005

System Datum: Mean Sea Level
Local North: True North

SITE DETAILS

NE/SE 2-11S-23E Pad
Sec. 2, T11S, R23E, Uintah County, Utah
1533 FSL & 490 FEL

Site Centre Latitude: 39°53'10.470N
Longitude: 109°18'10.110W

Ground Level: 5862.90
Positional Uncertainty: 0.00

TARGET DETAILS

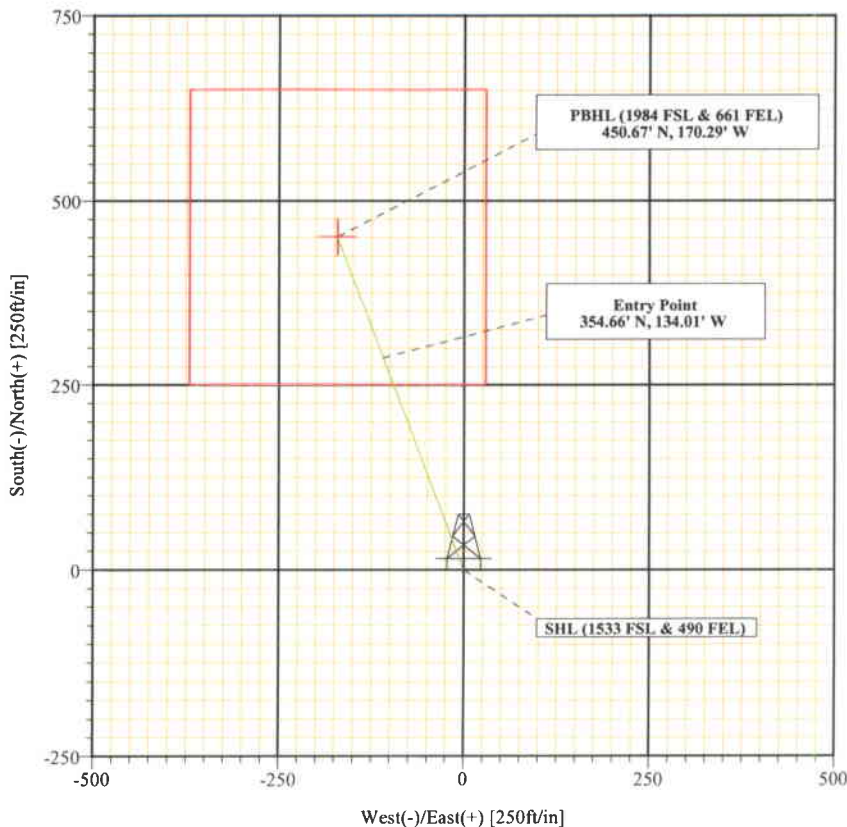
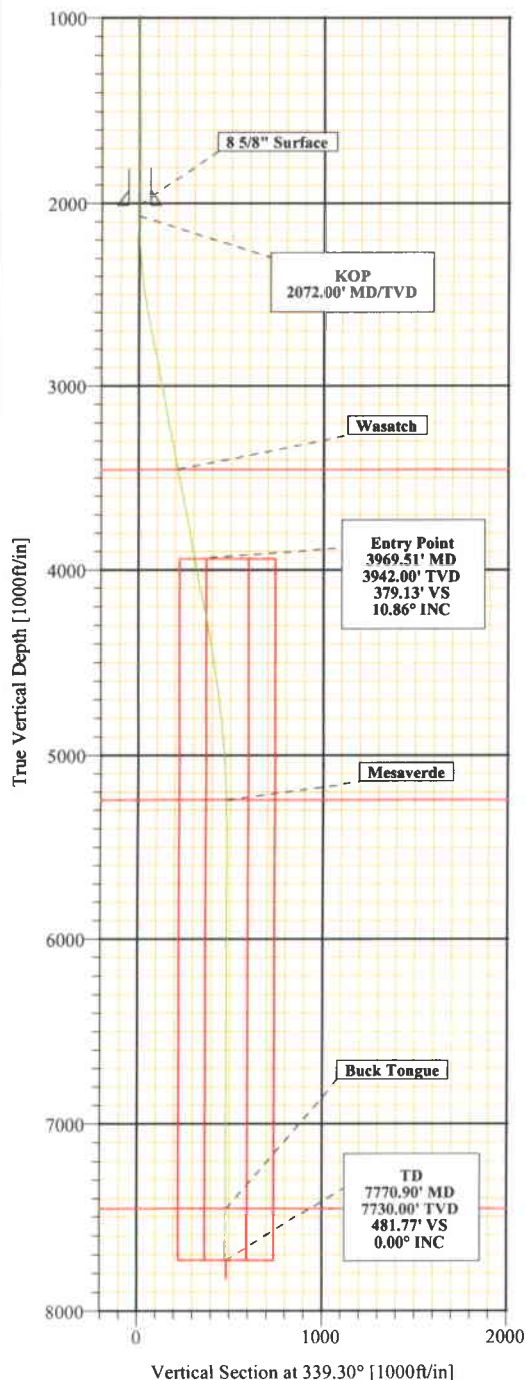
Name	TVD	+N/-S	+E/-W	Shape
Target	7730.00	450.67	-170.29	Rectangle (400x400)

CASING DETAILS

No.	TVD	MD	Name	Size
1	2012.00	2012.00	8 5/8" Surface	8.625

FORMATION TOP DETAILS

No.	TVDPath	MDPath	Formation
1	534.00	534.00	Green River
2	3454.00	3472.61	Wasatch
3	5244.00	5284.88	Mesaverde
4	7459.00	7499.90	Buck Tongue



Weatherford International

Planning Report

Company: Enduring Resources Field: Uintah, Utah Site: NE/SE 2-11S-23E Pad Well: Rock House 11-23-43-2 Wellpath: 1	Date: 3/16/2006 Co-ordinate(NE) Reference: Well: Rock House 11-23-43-2, True North Vertical (TVD) Reference: SITE 5879.0 Section (VS) Reference: Well (0.00N,0.00E,339.30Azl) Plan: Plan #1
--	--

Field: Uintah, Utah Utah Central Zone U.S.A. Map System: US State Plane Coordinate System 1983 Geo Datum: GRS 1980 Sys Datum: Mean Sea Level	Map Zone: Utah, Central Zone Coordinate System: Well Centre Geomagnetic Model: igrf2005
---	--

Site: NE/SE 2-11S-23E Pad Sec. 2, T11S, R23E, Uintah County, Utah 1533 FSL & 490 FEL Site Position: From: Geographic Position Uncertainty: 0.00 ft Ground Level: 5862.90 ft	Northing: 7134874.04 ft Easting: 2256889.15 ft Latitude: 39 53 10.470 N Longitude: 109 18 10.110 W North Reference: True Grid Convergence: 1.41 deg
--	--

Well: Rock House 11-23-43-2 Well Position: +N/-S 0.00 ft Position Uncertainty: 0.00 ft	Slot Name: Northing: 7134874.04 ft Easting: 2256889.15 ft Latitude: 39 53 10.470 N Longitude: 109 18 10.110 W
---	--

Wellpath: 1 Current Datum: SITE Magnetic Data: 3/16/2006 Field Strength: 52873 nT Vertical Section: Depth From (TVD) ft	Drilled From: Surface Tie-on Depth: 0.00 ft Above System Datum: Mean Sea Level Declination: 11.64 deg Mag Dip Angle: 65.95 deg +E/-W Direction deg 0.00 0.00 0.00 339.30
---	---

Plan: Plan #1 Principal: Yes	Date Composed: 3/16/2006 Version: 1 Tied-to: From Surface
---	--

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	339.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2072.00	0.00	339.30	2072.00	0.00	0.00	0.00	0.00	0.00	0.00	
2615.06	10.86	339.30	2611.81	48.00	-18.14	2.00	2.00	0.00	339.30	
4354.79	10.86	339.30	4320.38	354.66	-134.01	0.00	0.00	0.00	0.00	
5440.90	0.00	339.30	5400.00	450.67	-170.29	1.00	-1.00	0.00	180.00	
7770.90	0.00	339.30	7730.00	450.67	-170.29	0.00	0.00	0.00	339.30	Target

Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
0.00	0.00	339.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000.00	0.00	339.30	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	339.30
2012.00	0.00	339.30	2012.00	0.00	0.00	0.00	0.00	0.00	0.00	339.30
2072.00	0.00	339.30	2072.00	0.00	0.00	0.00	0.00	0.00	0.00	339.30

Section 2 : Start Build 2.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
2100.00	0.56	339.30	2100.00	0.13	-0.05	0.14	2.00	2.00	0.00	0.00
2200.00	2.56	339.30	2199.96	2.67	-1.01	2.86	2.00	2.00	0.00	0.00
2300.00	4.56	339.30	2299.76	8.48	-3.21	9.07	2.00	2.00	0.00	0.00
2400.00	6.56	339.30	2399.28	17.55	-6.63	18.76	2.00	2.00	0.00	0.00
2500.00	8.56	339.30	2498.41	29.85	-11.28	31.91	2.00	2.00	0.00	0.00
2600.00	10.56	339.30	2597.02	45.39	-17.15	48.52	2.00	2.00	0.00	0.00
2615.06	10.86	339.30	2611.81	48.00	-18.14	51.32	2.00	2.00	0.00	0.00

Weatherford International

Planning Report

Company: Enduring Resources
Field: Uintah, Utah
Site: NE/SE 2-11S-23E Pad
Well: Rock House 11-23-43-2
Wellpath: 1

Date: 3/16/2006 **Time:** 14:43:02 **Page:** 2
Co-ordinate(NE) Reference: Well: Rock House 11-23-43-2, True North
Vertical (TVD) Reference: SITE 5879.0
Section (VS) Reference: Well (0.00N,0.00E,339.30Azi)
Plan: Plan #1

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Buidl deg/100ft	Turn deg/100ft	TFO deg
2700.00	10.86	339.30	2695.23	62.98	-23.80	67.32	0.00	0.00	0.00	180.00
2800.00	10.86	339.30	2793.44	80.60	-30.46	86.17	0.00	0.00	0.00	180.00
2900.00	10.86	339.30	2891.65	98.23	-37.12	105.01	0.00	0.00	0.00	180.00
3000.00	10.86	339.30	2989.86	115.86	-43.78	123.85	0.00	0.00	0.00	180.00
3100.00	10.86	339.30	3088.07	133.48	-50.44	142.70	0.00	0.00	0.00	180.00
3200.00	10.86	339.30	3186.28	151.11	-57.10	161.54	0.00	0.00	0.00	180.00
3300.00	10.86	339.30	3284.48	168.74	-63.76	180.38	0.00	0.00	0.00	180.00
3400.00	10.86	339.30	3382.69	186.36	-70.42	199.22	0.00	0.00	0.00	180.00
3472.61	10.86	339.30	3454.00	199.16	-75.26	212.91	0.00	0.00	0.00	180.00
3500.00	10.86	339.30	3480.90	203.99	-77.08	218.07	0.00	0.00	0.00	180.00
3600.00	10.86	339.30	3579.11	221.62	-83.74	236.91	0.00	0.00	0.00	180.00
3700.00	10.86	339.30	3677.32	239.24	-90.40	255.75	0.00	0.00	0.00	180.00
3800.00	10.86	339.30	3775.53	256.87	-97.06	274.60	0.00	0.00	0.00	180.00
3900.00	10.86	339.30	3873.74	274.50	-103.72	293.44	0.00	0.00	0.00	180.00
3969.51	10.86	339.30	3942.00	286.75	-108.35	306.54	0.00	0.00	0.00	180.00
4000.00	10.86	339.30	3971.94	292.12	-110.38	312.28	0.00	0.00	0.00	180.00
4100.00	10.86	339.30	4070.15	309.75	-117.04	331.12	0.00	0.00	0.00	180.00
4200.00	10.86	339.30	4168.36	327.38	-123.70	349.97	0.00	0.00	0.00	180.00
4300.00	10.86	339.30	4266.57	345.00	-130.37	368.81	0.00	0.00	0.00	180.00
4354.79	10.86	339.30	4320.38	354.66	-134.01	379.13	0.00	0.00	0.00	180.00

Section 4 : Start Drop -1.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Buidl deg/100ft	Turn deg/100ft	TFO deg
4400.00	10.41	339.30	4364.81	362.46	-136.96	387.48	1.00	-1.00	0.00	180.00
4500.00	9.41	339.30	4463.32	378.56	-143.05	404.69	1.00	-1.00	0.00	180.00
4600.00	8.41	339.30	4562.11	393.05	-148.52	420.17	1.00	-1.00	0.00	180.00
4700.00	7.41	339.30	4661.16	405.92	-153.38	433.93	1.00	-1.00	0.00	180.00
4800.00	6.41	339.30	4760.43	417.17	-157.64	445.96	1.00	-1.00	0.00	180.00
4900.00	5.41	339.30	4859.90	426.80	-161.28	456.26	1.00	-1.00	0.00	180.00
5000.00	4.41	339.30	4959.53	434.81	-164.30	464.81	1.00	-1.00	0.00	180.00
5100.00	3.41	339.30	5059.30	441.18	-166.71	471.63	1.00	-1.00	0.00	180.00
5200.00	2.41	339.30	5159.17	445.93	-168.50	476.71	1.00	-1.00	0.00	180.00
5284.88	1.56	339.30	5244.00	448.68	-169.54	479.65	1.00	-1.00	0.00	-180.00
5300.00	1.41	339.30	5259.11	449.05	-169.68	480.04	1.00	-1.00	0.00	180.00
5400.00	0.41	339.30	5359.10	450.53	-170.24	481.62	1.00	-1.00	0.00	180.00
5440.90	0.00	339.30	5400.00	450.67	-170.29	481.77	1.00	-1.00	0.00	-180.00

Section 5 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Buidl deg/100ft	Turn deg/100ft	TFO deg
5500.00	0.00	339.30	5459.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
5600.00	0.00	339.30	5559.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
5700.00	0.00	339.30	5659.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
5800.00	0.00	339.30	5759.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
5900.00	0.00	339.30	5859.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
6000.00	0.00	339.30	5959.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
6100.00	0.00	339.30	6059.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
6200.00	0.00	339.30	6159.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
6300.00	0.00	339.30	6259.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
6400.00	0.00	339.30	6359.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
6500.00	0.00	339.30	6459.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
6600.00	0.00	339.30	6559.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
6700.00	0.00	339.30	6659.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
6800.00	0.00	339.30	6759.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
6900.00	0.00	339.30	6859.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
7000.00	0.00	339.30	6959.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
7100.00	0.00	339.30	7059.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
7200.00	0.00	339.30	7159.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
7300.00	0.00	339.30	7259.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
7400.00	0.00	339.30	7359.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
7499.90	0.00	339.30	7459.00	450.67	-170.29	481.77	0.00	0.00	0.00	339.30

Weatherford International

Planning Report

Company: Enduring Resources
Field: Uintah, Utah
Site: NE/SE 2-11S-23E Pad
Well: Rock House 11-23-43-2
Wellpath: 1

Date: 3/16/2006 **Time:** 14:43:02 **Page:** 3
Co-ordinate(NE) Reference: Well: Rock House 11-23-43-2, True North
Vertical (TVD) Reference: SITE 5879.0
Section (VS) Reference: Well (0.00N,0.00E,339.30Azi)
Plan: Plan #1

Section 5 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
7500.00	0.00	339.30	7459.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
7600.00	0.00	339.30	7559.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
7700.00	0.00	339.30	7659.10	450.67	-170.29	481.77	0.00	0.00	0.00	339.30
7770.90	0.00	339.30	7730.00	450.67	-170.29	481.77	0.00	0.00	0.00	339.30

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2000.00	0.00	339.30	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	MWD
2012.00	0.00	339.30	2012.00	0.00	0.00	0.00	0.00	0.00	0.00	8 5/8" Surface
2072.00	0.00	339.30	2072.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
2100.00	0.56	339.30	2100.00	0.13	-0.05	0.14	2.00	2.00	0.00	MWD
2200.00	2.56	339.30	2199.96	2.67	-1.01	2.86	2.00	2.00	0.00	MWD
2300.00	4.56	339.30	2299.76	8.48	-3.21	9.07	2.00	2.00	0.00	MWD
2400.00	6.56	339.30	2399.28	17.55	-6.63	18.76	2.00	2.00	0.00	MWD
2500.00	8.56	339.30	2498.41	29.85	-11.28	31.91	2.00	2.00	0.00	MWD
2600.00	10.56	339.30	2597.02	45.39	-17.15	48.52	2.00	2.00	0.00	MWD
2615.06	10.86	339.30	2611.81	48.00	-18.14	51.32	2.00	2.00	0.00	End Build
2700.00	10.86	339.30	2695.23	62.98	-23.80	67.32	0.00	0.00	0.00	MWD
2800.00	10.86	339.30	2793.44	80.60	-30.46	86.17	0.00	0.00	0.00	MWD
2900.00	10.86	339.30	2891.65	98.23	-37.12	105.01	0.00	0.00	0.00	MWD
3000.00	10.86	339.30	2989.86	115.86	-43.78	123.85	0.00	0.00	0.00	MWD
3100.00	10.86	339.30	3088.07	133.48	-50.44	142.70	0.00	0.00	0.00	MWD
3200.00	10.86	339.30	3186.28	151.11	-57.10	161.54	0.00	0.00	0.00	MWD
3300.00	10.86	339.30	3284.48	168.74	-63.76	180.38	0.00	0.00	0.00	MWD
3400.00	10.86	339.30	3382.69	186.36	-70.42	199.22	0.00	0.00	0.00	MWD
3472.61	10.86	339.30	3454.00	199.16	-75.26	212.91	0.00	0.00	0.00	Wasatch
3500.00	10.86	339.30	3480.90	203.99	-77.08	218.07	0.00	0.00	0.00	MWD
3600.00	10.86	339.30	3579.11	221.62	-83.74	236.91	0.00	0.00	0.00	MWD
3700.00	10.86	339.30	3677.32	239.24	-90.40	255.75	0.00	0.00	0.00	MWD
3800.00	10.86	339.30	3775.53	256.87	-97.06	274.60	0.00	0.00	0.00	MWD
3900.00	10.86	339.30	3873.74	274.50	-103.72	293.44	0.00	0.00	0.00	MWD
3969.51	10.86	339.30	3942.00	286.75	-108.35	306.54	0.00	0.00	0.00	Entry Point
4000.00	10.86	339.30	3971.94	292.12	-110.38	312.28	0.00	0.00	0.00	MWD
4100.00	10.86	339.30	4070.15	309.75	-117.04	331.12	0.00	0.00	0.00	MWD
4200.00	10.86	339.30	4168.36	327.38	-123.70	349.97	0.00	0.00	0.00	MWD
4300.00	10.86	339.30	4266.57	345.00	-130.37	368.81	0.00	0.00	0.00	MWD
4354.79	10.86	339.30	4320.38	354.66	-134.01	379.13	0.00	0.00	0.00	Start Drop
4400.00	10.41	339.30	4364.81	362.46	-136.96	387.48	1.00	-1.00	0.00	MWD
4500.00	9.41	339.30	4463.32	378.56	-143.05	404.69	1.00	-1.00	0.00	MWD
4600.00	8.41	339.30	4562.11	393.05	-148.52	420.17	1.00	-1.00	0.00	MWD
4700.00	7.41	339.30	4661.16	405.92	-153.38	433.93	1.00	-1.00	0.00	MWD
4800.00	6.41	339.30	4760.43	417.17	-157.64	445.96	1.00	-1.00	0.00	MWD
4900.00	5.41	339.30	4859.90	426.80	-161.28	456.26	1.00	-1.00	0.00	MWD
5000.00	4.41	339.30	4959.53	434.81	-164.30	464.81	1.00	-1.00	0.00	MWD
5100.00	3.41	339.30	5059.30	441.18	-166.71	471.63	1.00	-1.00	0.00	MWD
5200.00	2.41	339.30	5159.17	445.93	-168.50	476.71	1.00	-1.00	0.00	MWD
5284.88	1.56	339.30	5244.00	448.68	-169.54	479.65	1.00	-1.00	0.00	Mesaverde
5300.00	1.41	339.30	5259.11	449.05	-169.68	480.04	1.00	-1.00	0.00	MWD
5400.00	0.41	339.30	5359.10	450.53	-170.24	481.62	1.00	-1.00	0.00	MWD
5440.90	0.00	339.30	5400.00	450.67	-170.29	481.77	1.00	-1.00	0.00	Start Hold
5500.00	0.00	339.30	5459.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
5600.00	0.00	339.30	5559.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
5700.00	0.00	339.30	5659.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD

Weatherford International

Planning Report

Company: Enduring Resources Field: Uintah, Utah Site: NE/SE 2-11S-23E Pad Well: Rock House 11-23-43-2 Wellpath: 1	Date: 3/16/2006 Co-ordinate(NE) Reference: Well: Rock House 11-23-43-2, True North Vertical (TVD) Reference: SITE 5879.0 Section (VS) Reference: Well (0.00N,0.00E,339.30Azi) Plan: Plan #1
--	--

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
5800.00	0.00	339.30	5759.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
5900.00	0.00	339.30	5859.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
6000.00	0.00	339.30	5959.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
6100.00	0.00	339.30	6059.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
6200.00	0.00	339.30	6159.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
6300.00	0.00	339.30	6259.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
6400.00	0.00	339.30	6359.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
6500.00	0.00	339.30	6459.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
6600.00	0.00	339.30	6559.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
6700.00	0.00	339.30	6659.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
6800.00	0.00	339.30	6759.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
6900.00	0.00	339.30	6859.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
7000.00	0.00	339.30	6959.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
7100.00	0.00	339.30	7059.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
7200.00	0.00	339.30	7159.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
7300.00	0.00	339.30	7259.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
7400.00	0.00	339.30	7359.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
7499.90	0.00	339.30	7459.00	450.67	-170.29	481.77	0.00	0.00	0.00	Buck Tongue
7500.00	0.00	339.30	7459.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
7600.00	0.00	339.30	7559.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
7700.00	0.00	339.30	7659.10	450.67	-170.29	481.77	0.00	0.00	0.00	MWD
7770.90	0.00	339.30	7730.00	450.67	-170.29	481.77	0.00	0.00	0.00	TD

Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec		← Longitude → Deg Min Sec	
Target -Rectangle (400x400) -Plan hit target		7730.00	450.67	-170.29	7135320.39	2256707.84	39	53 14.924 N	109	18 12.295 W

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
2012.00	2012.00	8.625	12.250	8 5/8" Surface

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
534.00	534.00	Green River		0.00	0.00
3472.61	3454.00	Wasatch		0.00	0.00
5284.88	5244.00	Mesaverde		0.00	0.00
7499.90	7459.00	Buck Tongue		0.00	0.00

Annotation

MD ft	TVD ft	
2072.00	2072.00	SHL (1533 FSL & 490 FEL)
2615.06	2611.81	KOP
3969.51	3942.00	End Build
4354.79	4320.38	Entry Point
5440.90	5400.00	Start Drop
7770.90	7730.00	Start Hold
		TD

Lot 6

Lot 7

Lot 8

1/16 Section Line

1/16 Section Line

Section Line

Lot 9
38.76 Acres

Sec. 2

1/4 Section Line

2.72 Acres

5.93 Acres

1.40 Acres

*Mineral Survey
No. 5237*
10.05 Acres

Lot 10
32.71 Acres

1/16 Section Line

ENDURING RESOURCES

Acreage of Amgil Tract
SECTION 2, T11S, R23E, S1, B. & M
Uintah County, Utah

SCALE: 1" = 500'

DRAWN BY: J.R.S.

DATE DRAWN: 3-10-06
REVISED:

Timberline Land Surveying, Inc.
38 West 100 North Vernal, Utah 84078
(435) 789-1385

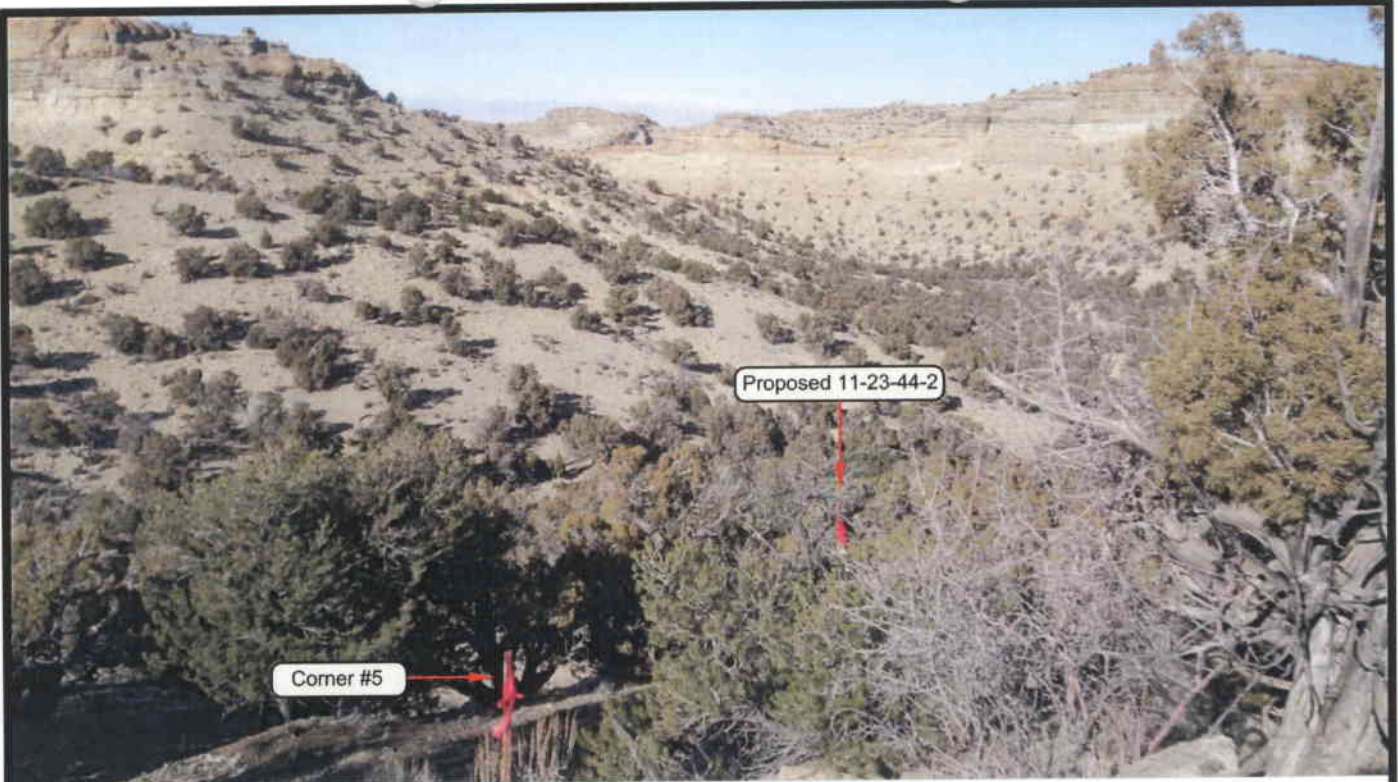


PHOTO VIEW: FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERY

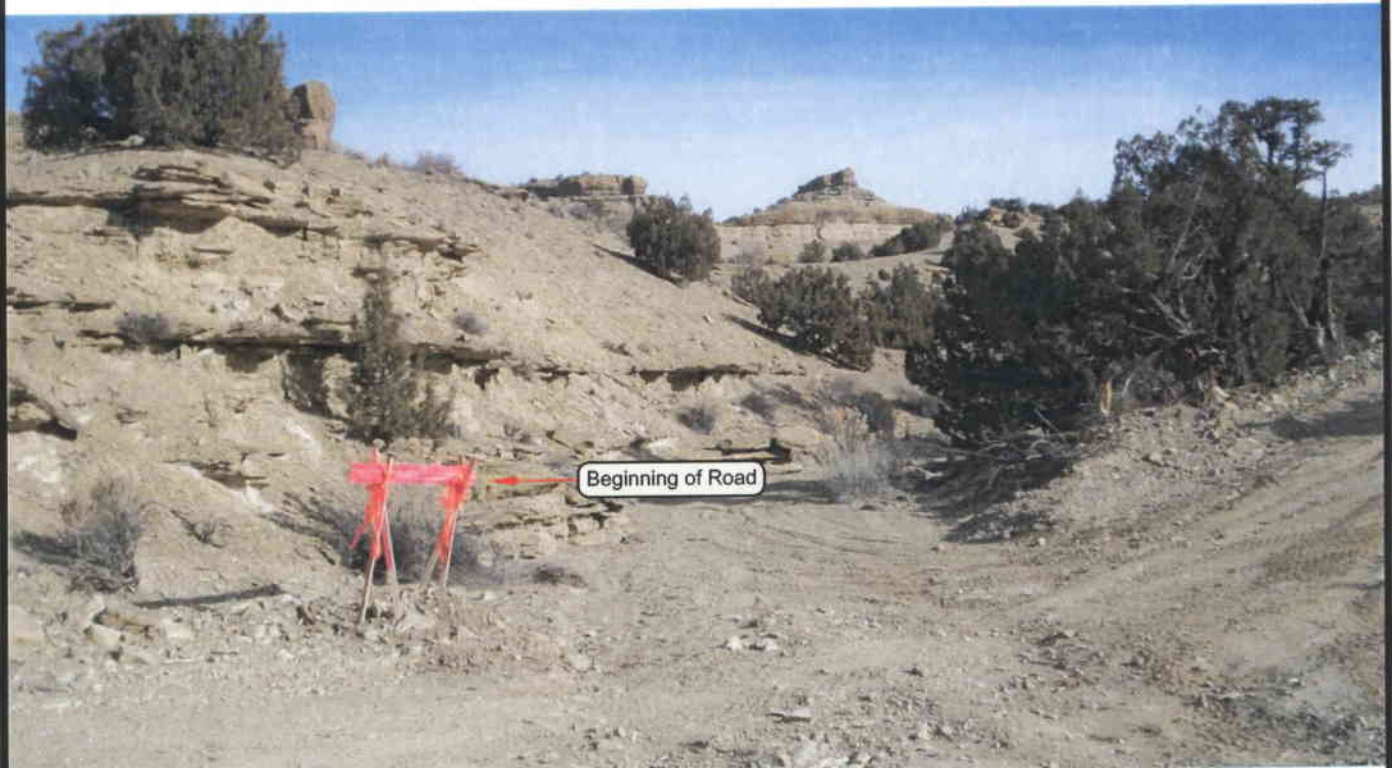


PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: EASTERLY

ENDURING RESOURCES

ROCK HOUSE 11-23-43-2D
& ROCK HOUSE 11-23-44-2D
SECTION 2, T11S, R23E, S.L.B.&M.
1533' FSL & 490' FEL

LOCATION PHOTOS

TAKEN BY: D.J.S.

DRAWN BY: M.W.W.

DATE TAKEN: 12-29-05

DATE DRAWN: 01-09-06

REVISED:

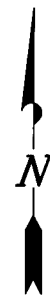
Timberline Land Surveying, Inc.

38 West 100 North Vernal, Utah 84078
(435) 789-1365

SHEET
1
OF 11

ENDURING RESOURCES

WELL PAD INTERFERENCE PLAT ROCK HOUSE 10-23-43-2D & ROCK HOUSE 10-23-44-2D



SURFACE POSITION FOOTAGES:

ROCK HOUSE 11-23-44-2D
1524' FSL & 511' FEL

ROCK HOUSE 11-23-43-2D
1533' FSL & 490' FEL

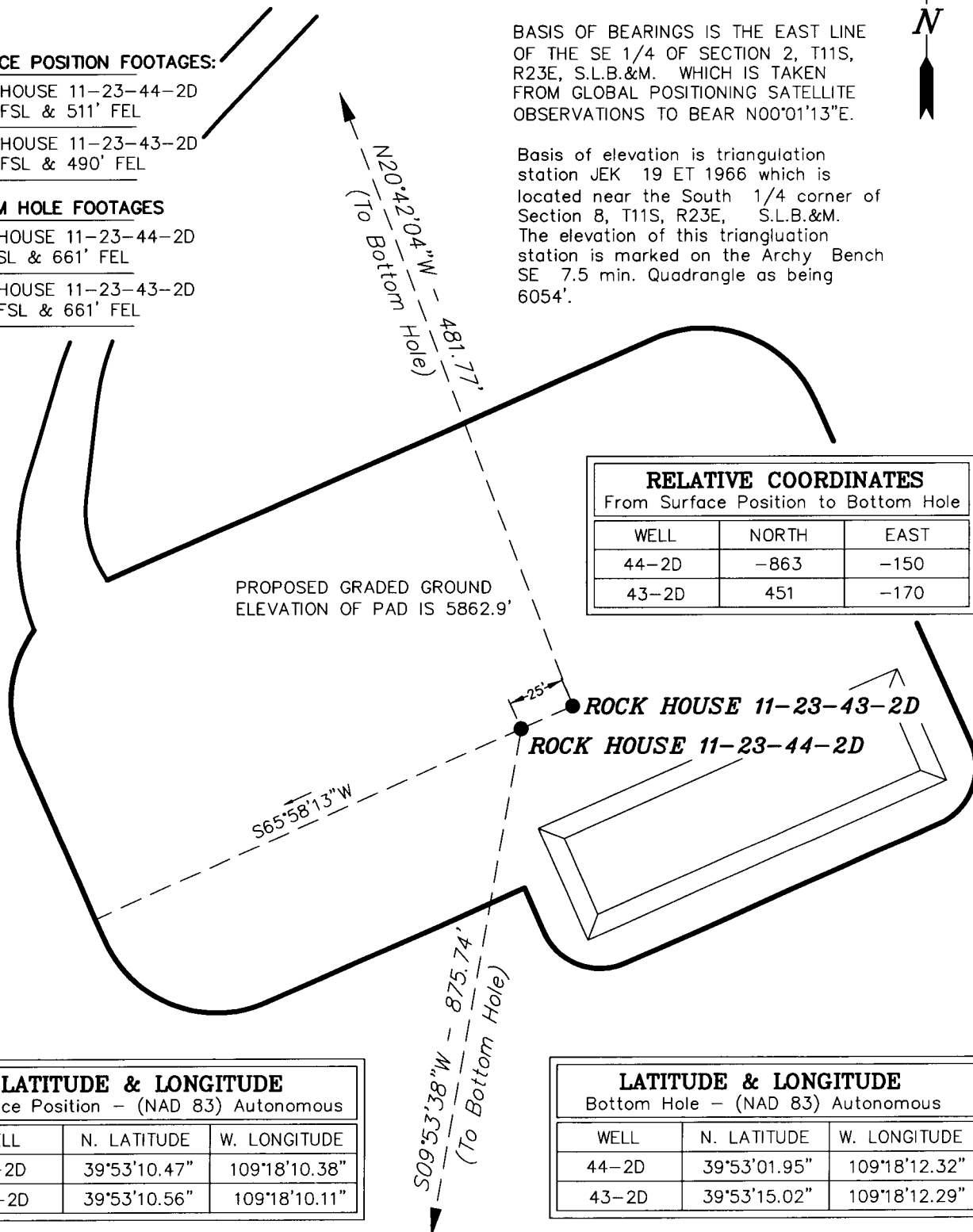
BOTTOM HOLE FOOTAGES

ROCK HOUSE 11-23-44-2D
661' FSL & 661' FEL

ROCK HOUSE 11-23-43-2D
1984' FSL & 661' FEL

BASIS OF BEARINGS IS THE EAST LINE OF THE SE 1/4 OF SECTION 2, T11S, R23E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°01'13"E.

Basis of elevation is triangulation station JEK 19 ET 1966 which is located near the South 1/4 corner of Section 8, T11S, R23E, S.L.B.&M. The elevation of this triangulation station is marked on the Archy Bench SE 7.5 min. Quadrangle as being 6054'.



RELATIVE COORDINATES		
From Surface Position to Bottom Hole		
WELL	NORTH	EAST
44-2D	-863	-150
43-2D	451	-170

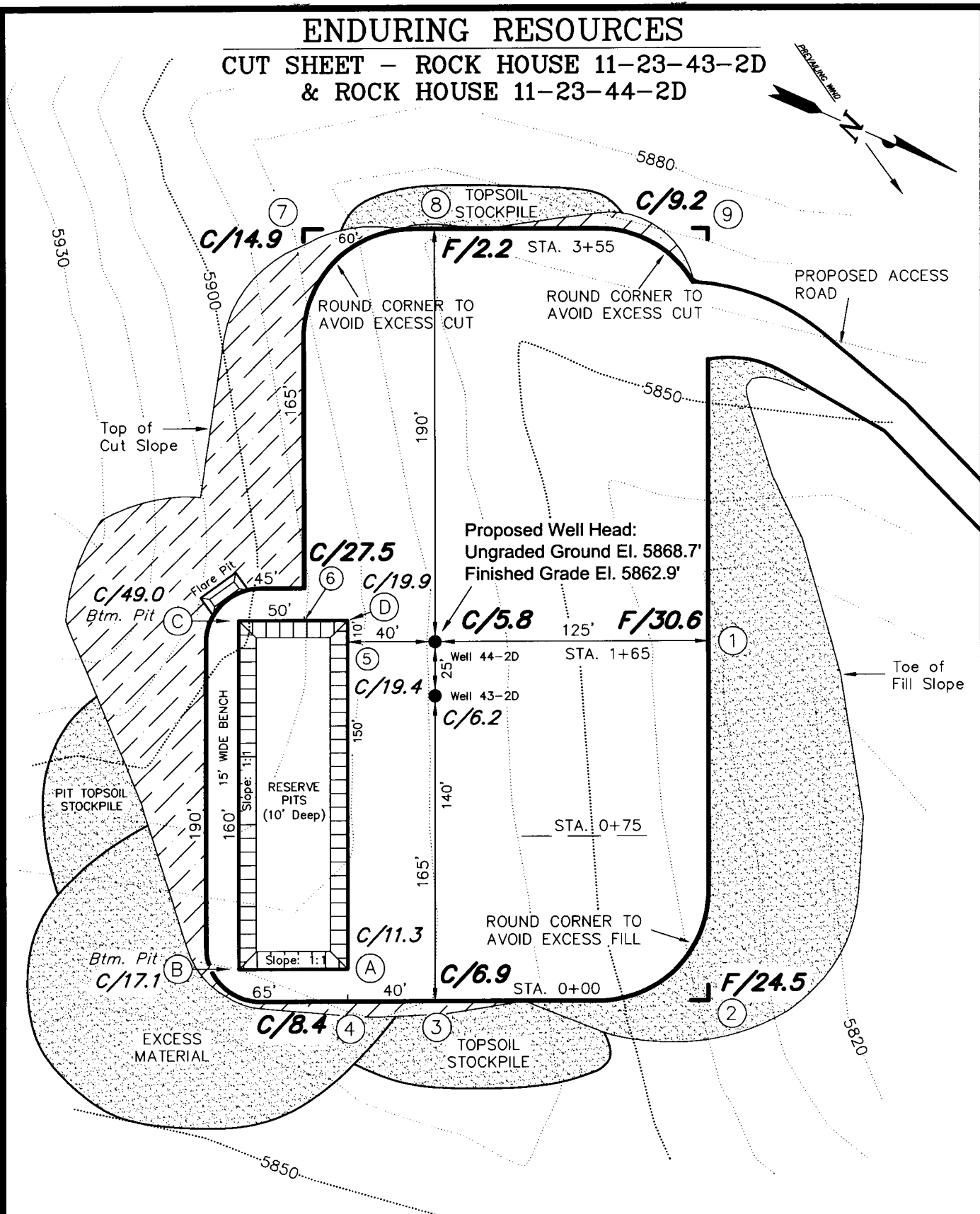
LATITUDE & LONGITUDE		
Surface Position - (NAD 83) Autonomous		
WELL	N. LATITUDE	W. LONGITUDE
44-2D	39°53'10.47"	109°18'10.38"
43-2D	39°53'10.56"	109°18'10.11"

LATITUDE & LONGITUDE		
Bottom Hole - (NAD 83) Autonomous		
WELL	N. LATITUDE	W. LONGITUDE
44-2D	39°53'01.95"	109°18'12.32"
43-2D	39°53'15.02"	109°18'12.29"

Section 2, T11S, R23E, S.L.B.&M.		Qtr/Qtr Location: NE SE	Footage Location: 1533' FSL & 490' FEL	Timberline Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078 (435) 789-1365	SHEET 3 OF 11
Date Surveyed: 12-29-05	Date Drawn: 01-06-06	Date Last Revision:			
Surveyed By: D.J.S.	Drawn By: M.W.W.	Scale: 1" = 60'			

ENDURING RESOURCES

CUT SHEET - ROCK HOUSE 11-23-43-2D & ROCK HOUSE 11-23-44-2D



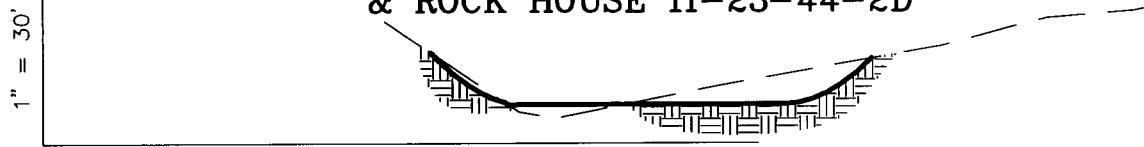
CONTOUR INTERVAL = 10'

Section 2, T11S, R23E, S.L.B.&M.		Qtr/Qtr Location: NE SE	Footage Location: 1533' FSL & 490' FEL
Date Surveyed: 12-29-05	Date Drawn: 01-06-05	Date Last Revision:	Timberline (435) 789-1365 Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078
Surveyed By: D.J.S.	Drawn By: M.W.W.	Scale: 1" = 60'	

SHEET
4
OF 11

ENDURING RESOURCES

CROSS SECTIONS - ROCK HOUSE 11-23-43-2D & ROCK HOUSE 11-23-44-2D



STA. 3+55

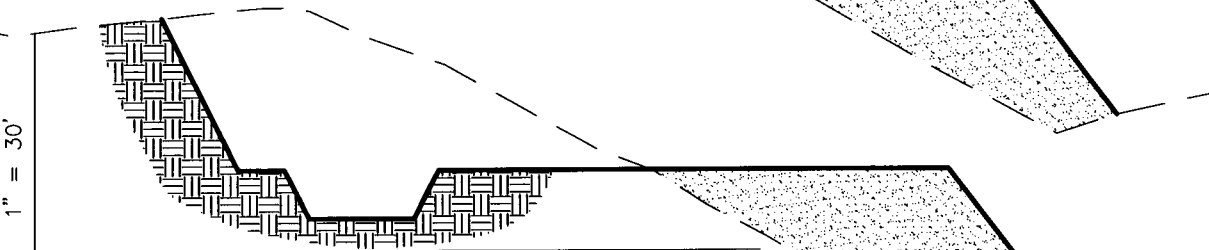
1" = 60'



STA. 1+65

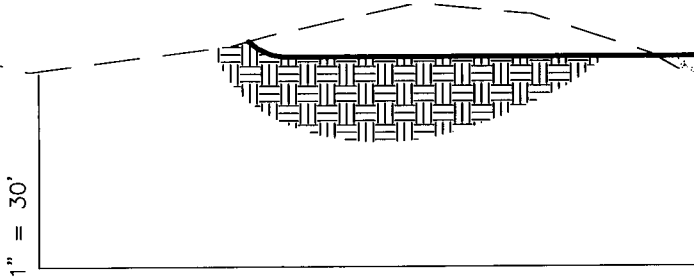
1" = 30'

1" = 60'



STA. 0+75

1" = 60'



STA. 0+00

1" = 30'

1" = 60'

NOTE:
UNLESS OTHERWISE NOTED
CUT SLOPES ARE AT 1:1
FILL SLOPES ARE AT 1.5:1

Pit overburden is included in pad cut.

REFERENCE POINTS

225' NORTHWESTERLY = 5830.0'
180' NORTHWESTERLY = 5825.2'
240' SOUTHWESTERLY = 5877.4'
290' SOUTHWESTERLY = 5894.0'

ESTIMATED EARTHWORK QUANTITIES (No shrink or swell adjustments have been used) (Expressed in Cubic Yards)

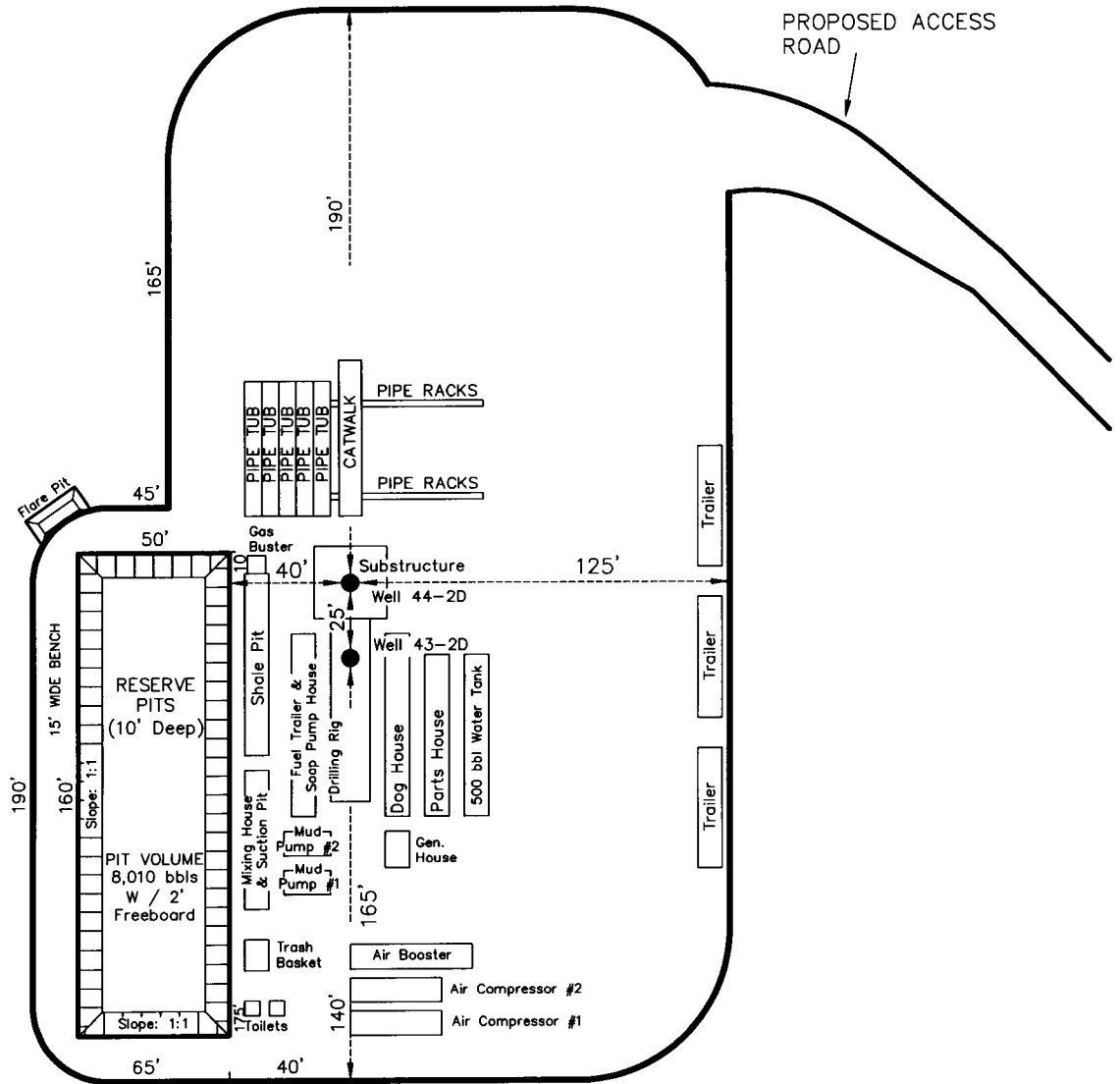
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	25,900	27,010	Topsoil is not included in Pad Cut	-1,110
PIT	2,220	0		2,220
TOTALS	28,120	27,010	1,370	1,110

Excess Material after Pit Rehabilitation = 0 Cu. Yds.

Section 2, T11S, R23E, S.L.B.&M.	Qtr/Qtr Location: NE SE	Footage Location: 1533' FSL & 490' FEL
Date Surveyed: 12-29-05	Date Drawn: 01-06-05	Date Last Revision:
Surveyed By: D.J.S.	Drawn By: M.W.W.	Scale: 1" = 60'
Timberline Land Surveying, Inc. 38 WEST 100 NORTH VERNAL, UTAH 84078 (435) 789-1365		
SHEET 5 OF 11		

ENDURING RESOURCES

TYPICAL RIG LAYOUT - ROCK HOUSE 11-23-43-2D & ROCK HOUSE 11-23-44-2D



Section 2, T11S, R23E, S.L.B.&M.

Qtr/Qtr Location: NE SE

Footage Location: 1533' FSL & 490' FEL

Date Surveyed:
12-29-05

Date Drawn:
01-06-05

Date Last Revision:

Timberline (435) 789-1365
Land Surveying, Inc.

SHEET

Surveyed By: D.J.S.

Drawn By: M.W.W.

Scale: 1" = 60'

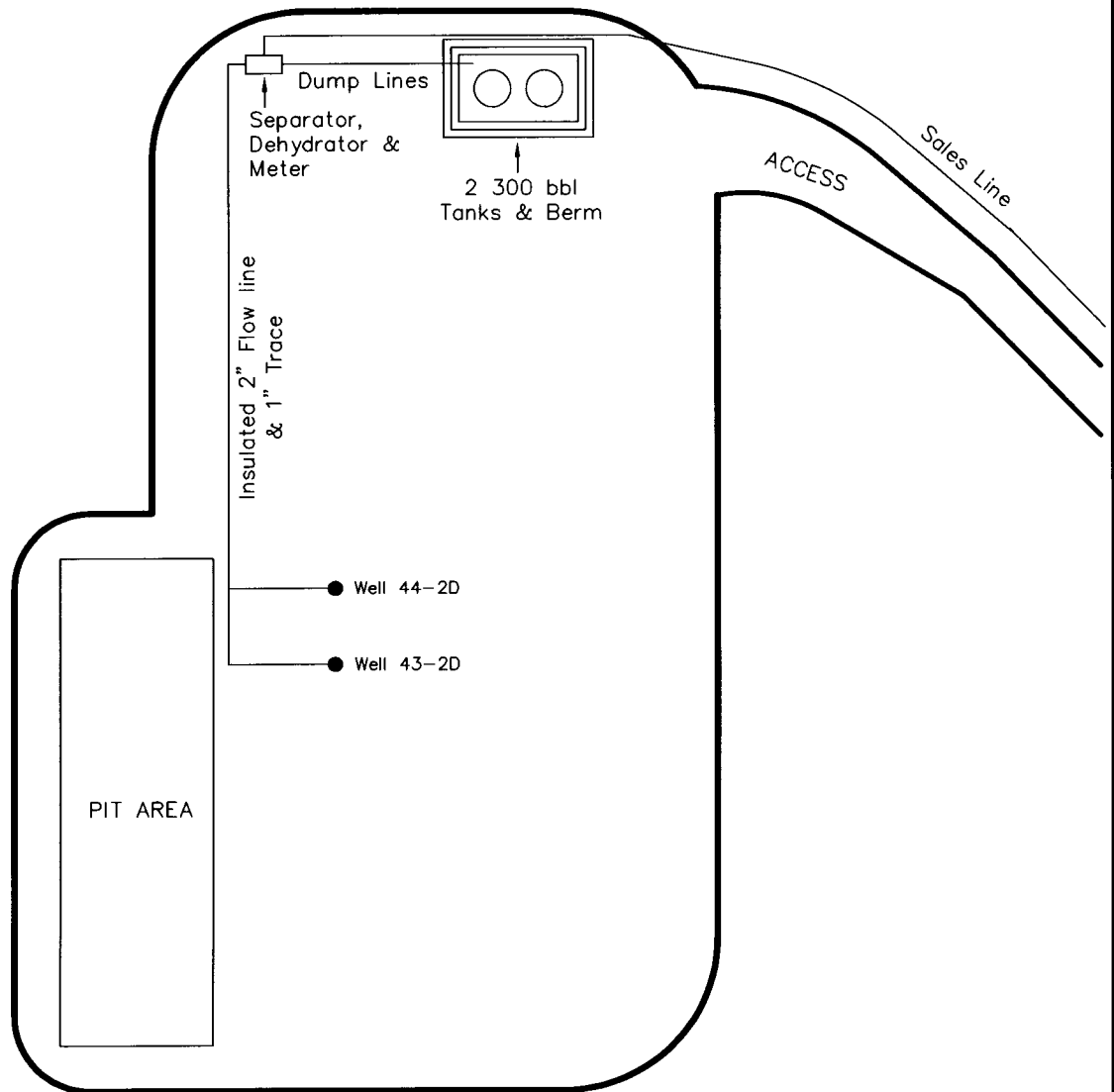
38 WEST 100 NORTH VERNAL, UTAH 84078

6

OF 11

ENDURING RESOURCES

TYPICAL PRODUCTION LAYOUT – ROCK HOUSE 11-23-43-2D & ROCK HOUSE 11-23-44-2D



Section 2, T11S, R23E, S.L.B.&M.

Qtr/Qtr Location: NE SE

Footage Location: 1533' FSL & 490' FEL

Date Surveyed:
12-29-05

Date Drawn:
01-06-05

Date Last Revision:

Timberline
Land Surveying, Inc.

(435) 789-1365

SHEET

7

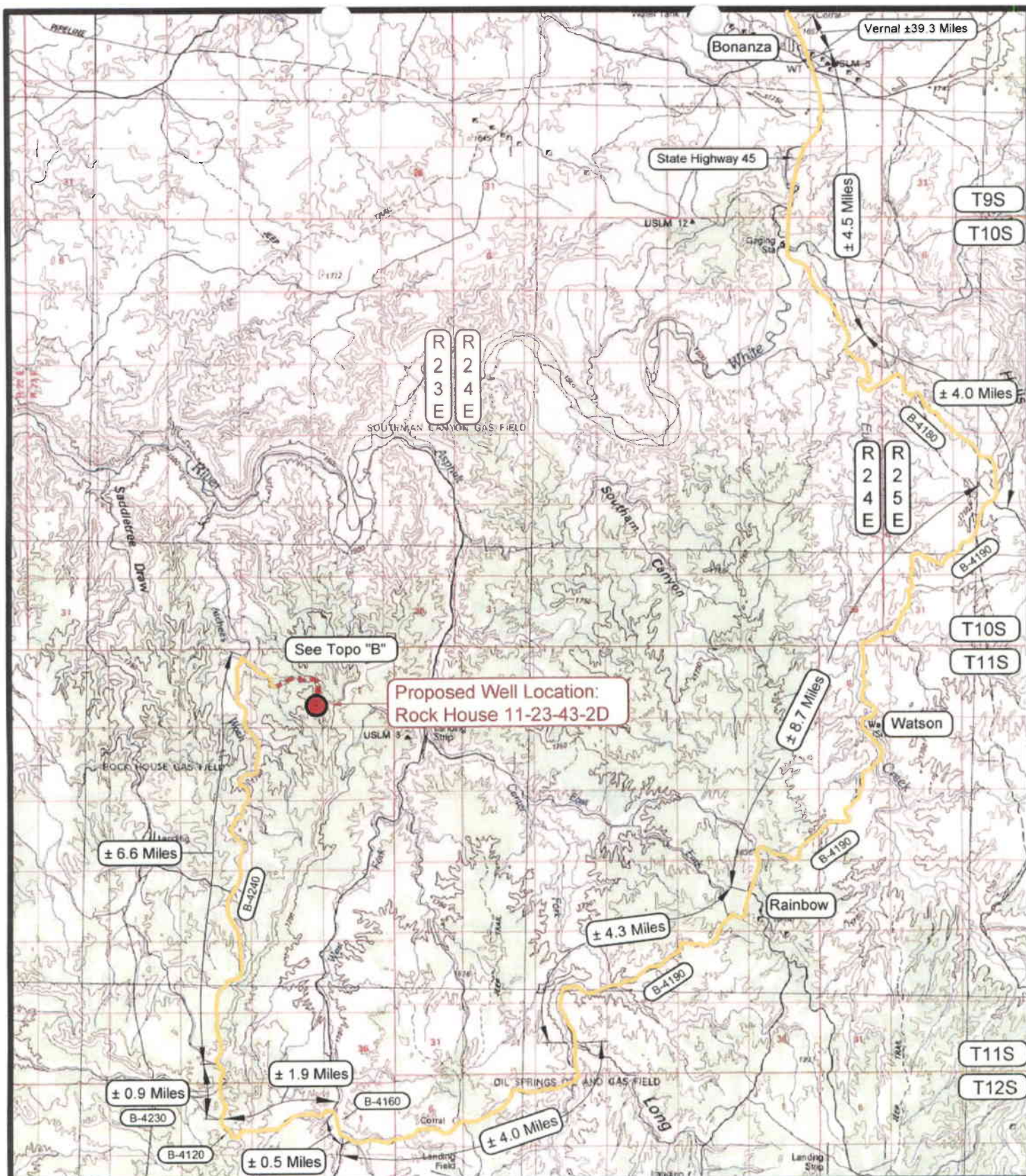
Surveyed By: D.J.S.

Drawn By: M.W.W.

Scale: 1" = 60'

38 WEST 100 NORTH VERNAL, UTAH 84078

OF 11



LEGEND

PROPOSED ACCESS ROAD
 --- = SUBJECT WELL
 --- = OTHER WELLS
 --- = EXISTING ROAD
 --- = EXISTING ROAD (TO BE IMPROVED)

(B-5460) = COUNTY ROAD CLASS
 & NUMBER

TOPOGRAPHIC MAP "A"

DATE SURVEYED: 12-29-05

DATE DRAWN: 01-06-05

SCALE: 1"=10,000'

DRAWN BY: M.W.W

REVISED

ENDURING RESOURCES

Rock House 11-23-43-2D
 & Rock House 11-23-44-2D
 SECTION 2, T11S, R23E, S.L.B.&M.
 1533' FSL & 490' FEL

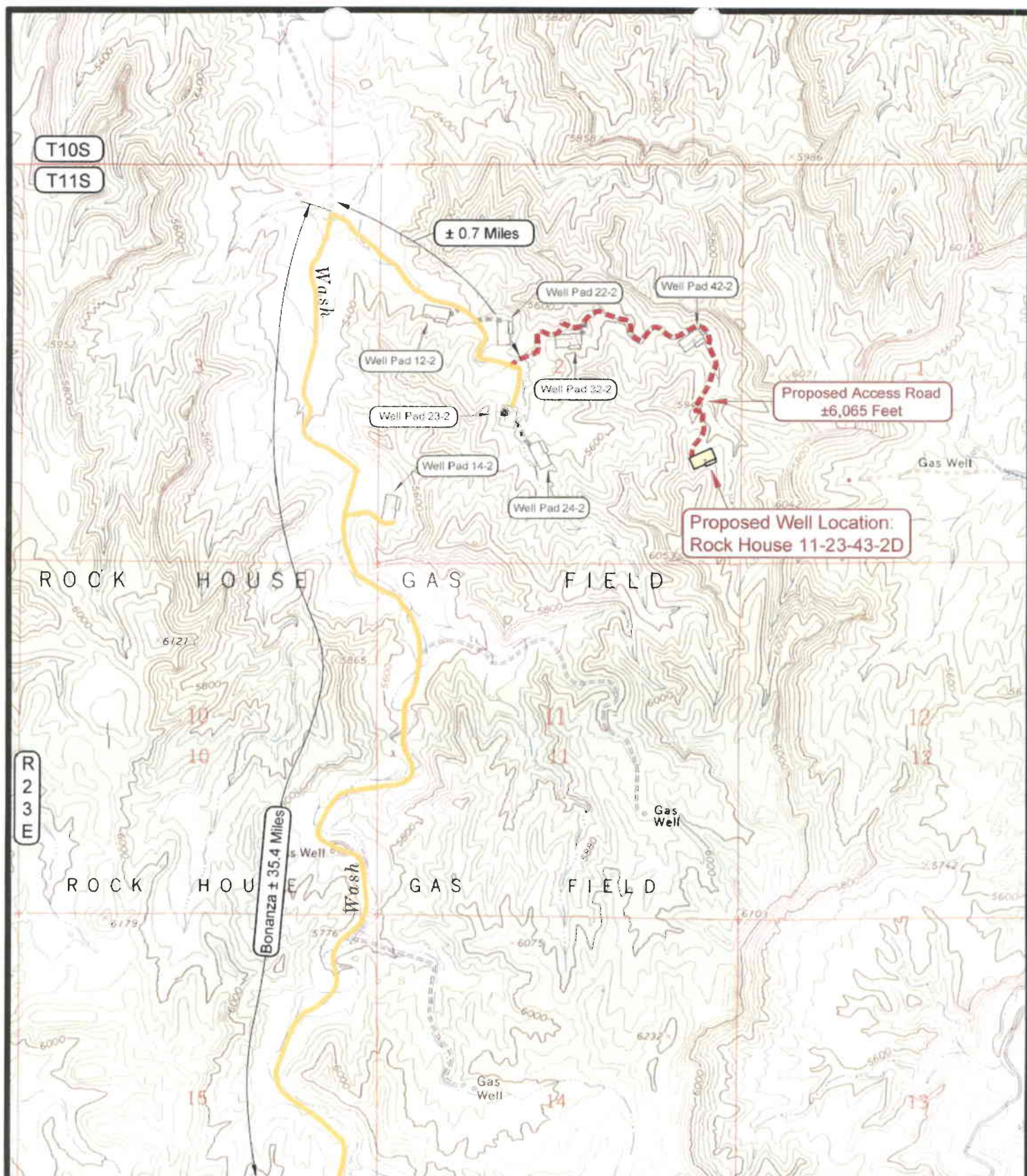
Timberline Land Surveying, Inc.

38 West 100 North Vernal, Utah 84078
 (435) 789-1365

SHEET

8

OF 11



LEGEND

- PROPOSED ACCESS ROAD
- = SUBJECT WELL
- = OTHER WELLS
- = EXISTING ROAD
- = EXISTING ROAD (TO BE IMPROVED)
- (B-5460) = COUNTY ROAD CLASS & NUMBER
- = LEASE LINE AND / OR PROPERTY LINE

TOPOGRAPHIC MAP "B"

SCALE: 1" = 2000'

DRAWN BY: M.W.W.

DATE SURVEYED: 12-29-05

DATE DRAWN: 01-06-06

REVISED:

ENDURING RESOURCES

**Rock House 11-23-43-2D
& Rock House 11-23-44-2D
SECTION 2, T11S, R23E, S.L.B.&M.
1533' FSL & 490' FEL**

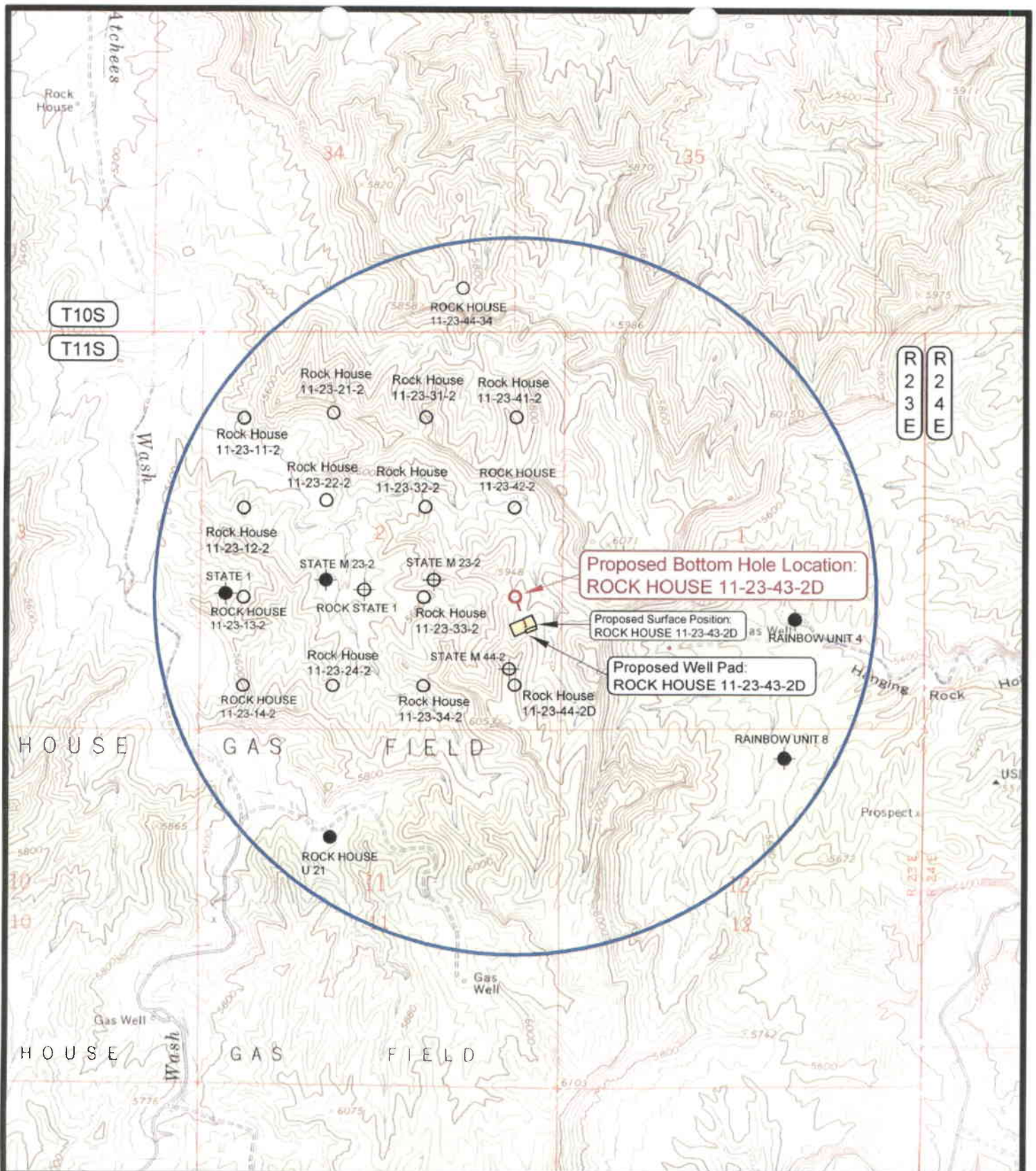
Timberline Land Surveying, Inc.

38 West 100 North Vernal, Utah 84078
(435) 789-1365

SHEET

9

OF 11



LEGEND

- | | |
|--------------------|--------------------------------|
| ○ = DISPOSAL WELL | ○ = WATER WELL |
| ● = PRODUCING WELL | ● = ABANDONED WELL |
| ● = SHUT IN WELL | ● = TEMPORARILY ABANDONED WELL |
| ○ = PROPOSED WELL | ⊕ = ABANDONED LOCATION |

TOPOGRAPHIC MAP "C"

DATE SURVEYED: 12-29-05

DATE DRAWN: 01-09-06

SCALE: 1" = 2000'

DRAWN BY: M.W.W.

REVISED:

ENDURING RESOURCES

ROCK HOUSE 11-23-43-2
SECTION 2, T11S, R23E, S.L.B.&M.
Bottom Hole: 1984' FSL & 661' FEL

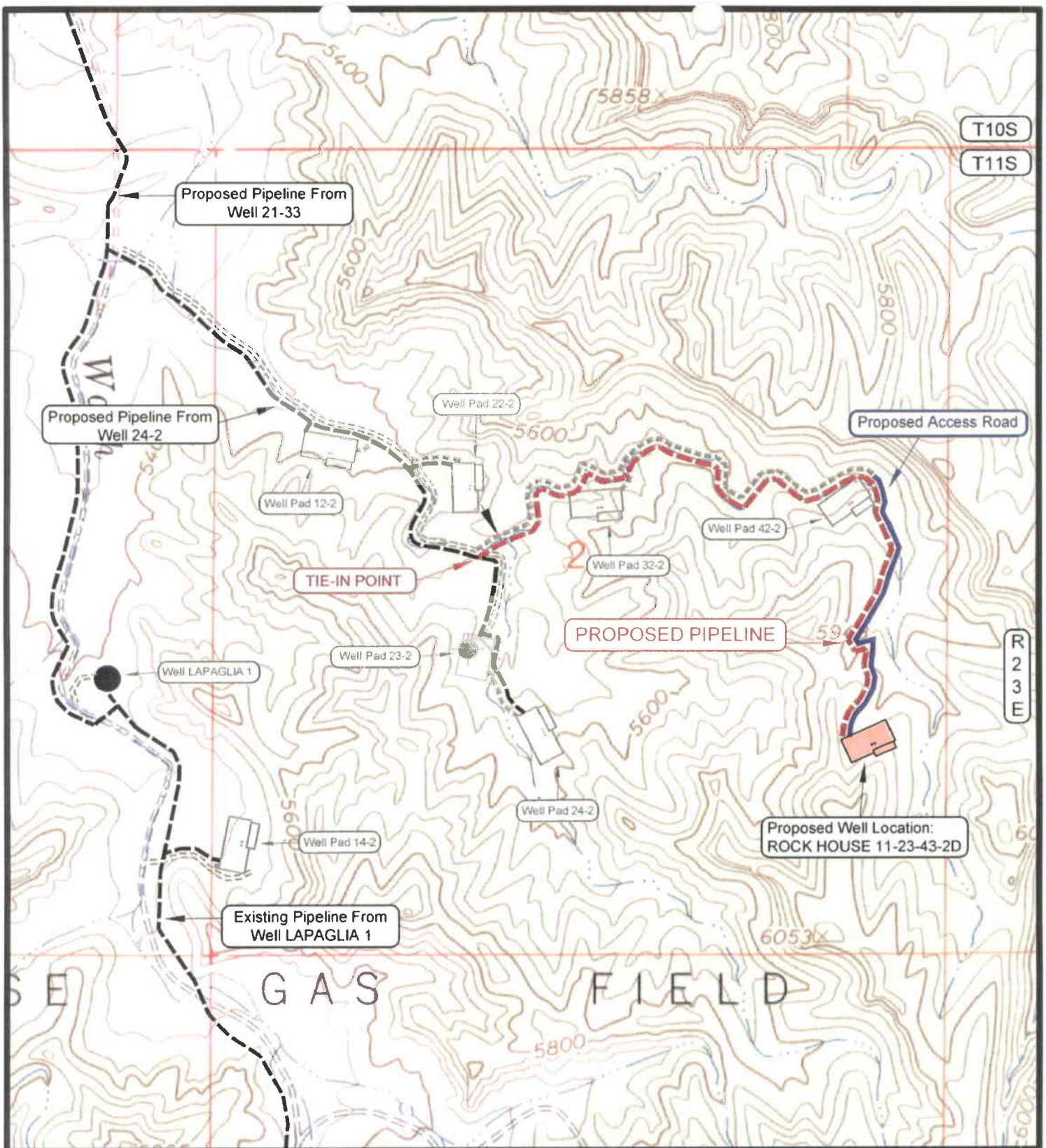
Timberline Land Surveying, Inc.

38 West 100 North Vernal, Utah 84078
 (435) 789-1365

SHEET

10a

OF 11



APPROXIMATE PIPELINE LENGTH = 6,015 Feet

LEGEND

- = PROPOSED PIPELINE
- = OTHER PIPELINE
- = PROPOSED ACCESS ROAD
- = SUBJECT WELL
- = OTHER WELLS
- = LEASE LINE AND / OR PROPERTY LINE

TOPOGRAPHIC MAP "D"

DATE SURVEYED: 12-29-05

DATE DRAWN: 01-09-05

SCALE: 1" = 1000'

DRAWN BY: M.W.W.

REVISED:

ENDURING RESOURCES

**ROCK HOUSE 11-23-43-2D
& ROCK HOUSE 11-23-44-2D
SECTION 2, T11S, R23E, S.L.B.&M.
1533' FSL & 490' FEL**

Timberline Land Surveying, Inc.
38 West 100 North Vernal, Utah 84078
(435) 789-1365

**SHEET
11
OF 11**

3,000 PSI

BOP STACK

